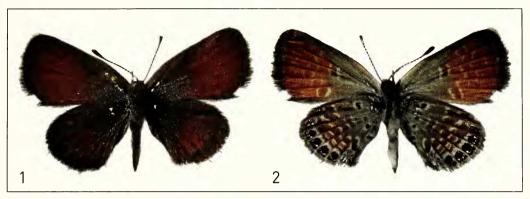
Recent geographic range expansion of *Brephidium exilis* (Boisduval, 1852) (Lycaenidae) in Oman, Arabian Peninsula

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Figs 1, 2. Brephidium exilis (Boisduval), 27 November 2008, Qurm, Oman. 1. recto. 2. verso.

On 27 November 2008 I caught one specimen of a tiny lycaenid butterfly (wingspan 16 mm, Figs 1, 2) at Qurm, a little settlement west of Muscat, the capital of Oman. The insect was flying over a more or less disturbed and untidy roadside. The species could not be identified with the existing works on Arabian butterflies (Larsen & Larsen 1980; Pittaway 1985). But many butterfly species in the Arabian Peninsula are of Afrotropical origin (Larsen & Larsen 1980; Larsen 1984). The next step was searching recent literature on African butterflies (Larsen 1996, 2005) without result. In Penninton's Butterflies (Dickson 1978), I found at last the genus *Brephidium* with the species *metophis* Wallengren, 1860, an endemic and very small lycaenid from South Africa, whose appearance was very similar to my Oman butterfly. However, it was not the same species!

A search on the internet showed that genus *Brephidium* also occurs in North America, where it is represented by several species. Comparison with existing photos on the site 'Butterflies of America' (Warren et al. 2009) identified my Oman lycaenid as the Western Pygmy Blue *Brephidium exilis* (Boisduval, 1852). To confirm my diagnosis, I sent photographs to Andrew D. Warren, one of the authors of this site. His answer was very clear: "Yes, you do appear to have *Brephidium exilis*". He also kindly drew my attention to a paper dealing with this species in the Emirates (Larsen 2000).

Torben Larsen sent me an exellent paper by Pittaway et al. (2006), where one record of *Brephidium exilis* was published from the extreme north of Oman: Buraimi & Mahdah. In the same paper a survey is given on the distribution of this lycaenid in the Arabian Peninsula, where it has been found in Saudi Arabia, United Arab Emirates, and Oman.



It is suggested that the butterfly was accidently introduced during the early 1990s through the import of North American halophytes (Pittaway et al. 2006).

My record suggests the species is still extending its range in Oman since Qurm is situated much further south than Buraimi (near Al Ain). It will be very interesting to follow this tiny species in its efforts to occupy other suitable habitats.

Fig. 3. Map of Oman with the two localities of *Brephidium exilis* (Boisduval).

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References

Dickson, C. G. C. 1978. Pennington's Butterflies of southern Africa. – Ad. Donker (PTY) Ltd, Johannesburg. 668 pp.

Larsen, T. B. 1984. The zoogeographical composition and distribution of the Arabian butterflies (Lepidoptera: Rhopalocera). – Journal of Biogeography 11: 119–158

Larsen, T. B. 1996. The butterflies of Kenya. – Oxford University Press. 500 pp.

Larsen, T. B. 2000. Hazards of butterfly collecting – What is *Brephidium exile* [sic] doing in the Emirates? Entomologists' Record and Journal of Variation **112** (2): 273–274.

Larsen, T. B. 2005. Butterflies of West Africa. – Apollo Books, Stenstrup. 595 pp. (text); 270 pp. (plates). Larsen, T. B. & K. Larsen 1980. Butterflies of Oman. – John Bartholomew and Son, Edinburgh. 80 pp.

Pittaway, A. R. 1985. Lepidoptera: Rhopalocera of western Saudi Arabia. – Fauna of Saudi Arabia 7: 172–197.

Pittaway, A. R., T. B. Larsen, A. Legrain, J. Majer, Z. Weidenhoffer & M. Gillet 2006. The establishment of an American butterfly in the Arabic Gulf: *Brephidum exilis* (Boisduval, 1852) (Lycaenidae). – Nota Lepidopterologica **29** (1–2): 5–16.

Warren, A. D., K. J. Davis, N. V. Grishin, J. P. Pelham & E. M. Stangeland 2009. – URL: http://butter-fliesofamerica.com/intro.htm (last visited on September 14, 2009).